

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
TYLER DIVISION**

MOSAID TECHNOLOGIES INC.,

Plaintiff,

v.

STMICROELECTRONICS, INC.

Defendant.

C.A. No.: \_\_\_\_\_

JURY TRIAL DEMANDED

**COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff MOSAID Technologies Inc. (“MOSAID”), by and through its undersigned counsel, for its Complaint for Patent Infringement against Defendant STMicroelectronics, Inc. (“STM”) hereby states:

**THE PARTIES**

1. Plaintiff MOSAID Technologies Inc. is a corporation subject to the laws of Canada with its principal place of business at 11 Hines Road, Suite 203, Ottawa, Ontario, Canada K2K 2X1. MOSAID’s United States principal place of business is located at 5700 Granite Parkway, Suite 960, Plano, Texas 75024.

2. Defendant ST Microelectronics, Inc. (“S-T Micron”) is a Delaware corporation with its principal place of business at 750 Canyon Drive, Suite 300, Coppel, Texas 75019. Defendant S-T Micron may be served through its registered agent, CT Corporation System, 350 N. St. Paul Street, Suite 2900, Dallas, TX 75201-4234. S-T Micron is authorized to do business in the State of Texas, and regularly conducts such business within the State and within this judicial district by way of sales and product distributions.

### JURISDICTION AND VENUE

3. This is an action for patent infringement arising under the provisions of the Patent Laws of the United States of America, Title 35, United States Code.

4. Subject-matter jurisdiction over MOSAID's claims is conferred upon this Court by 28 U.S.C. § 1331 (federal question jurisdiction) and 28 U.S.C. § 1338(a) (patent jurisdiction).

5. This Court has personal jurisdiction over STM, which has conducted and continues to conduct business in the State of Texas and in this Judicial District. STM directly and/or through intermediaries makes, offers for sale, sells and/or advertises (including through a website) products and services in the State of Texas and in this Judicial District. STM committed acts of patent infringement alleged herein within the State of Texas and, more particularly, within this Judicial District. STM purposefully and voluntarily placed its infringing products into the stream of commerce with the expectation that they will be purchased by consumers in the State of Texas and in this Judicial District. These infringing products have been and continue to be purchased by consumers in the state of Texas and in this Judicial District.

6. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b) and (c) and §1400(b).

### **ASSERTED PATENTS**

7. On May 23, 2006, United States Patent No. 7,051,306 ("the '306 Patent," entitled "Managing Power on Integrated Circuits Using Power Islands") duly and legally issued. The '306 Patent relates to, among other things, power consumption management in integrated circuits. MOSAID is the owner of the '306 Patent and has all rights to enforce the '306 Patent with respect

to the Defendant. A copy of the '306 Patent is attached as Exhibit A.

8. On November 19, 1996, United States Patent No. 5,577,230 ("the '230 Patent," entitled "Apparatus and Method for Computer Processing Using an Enhanced Harvard Architecture Utilizing Dual Memory Buses and the Arbitration for Data/Instruction Fetch") duly and legally issued. The '230 Patent relates to, among other things, computer processors and memory architectures. MOSAID is the exclusive licensee of the '230 Patent and is the current owner of all rights to enforce the '230 Patent with respect to the Defendant. A copy of the '230 Patent is attached as Exhibit B.

9. On March 3, 1998, United States Patent No. 5,724,505 ("the '505 Patent," entitled "Apparatus and Method for Real-Time Program Monitoring via a Serial Interface") duly and legally issued. The '505 Patent relates to, among other things, monitoring computer program execution in microprocessor devices. MOSAID is the exclusive licensee of the '505 Patent and is the current owner of all rights to enforce the '505 Patent with respect to the Defendant. A copy of the '505 Patent is attached as Exhibit C.

10. On September 28, 1999, United States Patent No. 5,958,036 ("the '036 Patent," entitled "Circuit for Arbitrating Interrupts with Programmable Priority Levels") duly and legally issued. The '036 Patent relates to, among other things, interrupt priority arbitration in computer devices. MOSAID is the exclusive licensee of the '036 Patent and is the current owner of all rights to enforce the '036 Patent with respect to the Defendant. A copy of the '036 Patent is attached as Exhibit D.

11. On July 3, 2001, United States Patent No. 6,256,725 ("the '725 Patent," entitled "Shared Datapath Processor Utilizing Stack-Based and Register-Based Storage Spaces") duly and legally issued. The '725 Patent relates to, among other things, computer processor

architectures. MOSAID is the exclusive licensee of the '725 Patent and is the current owner of all rights to enforce the '725 Patent with respect to the Defendant. A copy of the '725 Patent is attached as Exhibit E.

12. On May 28, 2002, United States Patent No. 6,397,240 ("the '240 Patent," entitled "Programmable accelerator for a programmable processor system") duly and legally issued. The '240 Patent relates to, among other things, a programmable multi-mode accelerator for use with a programmable processor. MOSAID is the owner of the '240 Patent and has all rights to enforce the '240 Patent with respect to the Defendant. A copy of the '240 Patent is attached as Exhibit F.

13. On September 3, 2002, United States Patent No. 6,446,193 ("the '193 Patent," entitled "Method and apparatus for single cycle processing of data associated with separate accumulators in a dual multiply-accumulate architecture") duly and legally issued. The '193 Patent relates to, among other things, a method and apparatus for reducing instruction cycles in a digital signal processor. MOSAID is the exclusive licensee of the '193 Patent and is the current owner of all rights to enforce the '193 Patent with respect to the Defendant. A copy of the '193 Patent is attached as Exhibit G.

14. On May 16, 2000, United States Patent No. 6,064,712 ("the '712 Patent," entitled "Autoreload loop counter") duly and legally issued. The '712 Patent relates to, among other things, a loop counter reload circuit. MOSAID is the owner of the '712 Patent and has all rights to enforce the '712 Patent with respect to the Defendants. A copy of the '712 Patent is attached as Exhibit H.

15. The '306 Patent, '230 Patent, '505 Patent, '036 Patent, '725 Patent, '240 Patent, '193 Patent and '712 Patent are collectively referred to as the "Asserted Patents."

### **GENERAL ALLEGATIONS**

16. Defendant STM has directly infringed and continues to directly infringe one or more of the Asserted Patents by making, using, offering to sell, selling, or importing devices within the scope of one or more of the claims of the Asserted Patents. The infringing devices include, but are not limited to, processors, mobile products, microcontrollers, communications equipment, and system-on-chip devices.

17. Defendant STM has indirectly infringed and continues to indirectly infringe one or more of the Asserted Patents by contributing to and actively inducing infringement of one or more of the claims of the Asserted Patents. Defendant STM has notice of the Asserted Patents. The infringing devices are known by Defendant STM to be especially made or especially adapted for use in an infringement of one or more of the Asserted Patents, and are not staple articles or commodities of commerce suitable for substantial noninfringing uses. Defendant STM contributes to the infringement of one or more of the Asserted Patents by selling or importing the infringing devices to third parties, such as end-users, resellers, partners, and distributors who incorporate the infringing devices into their products and/or practice one or more claims of the Asserted Patents. Defendant STM actively induces infringement by encouraging the use of the infringing devices by the third parties in ways that infringe one or more of the claims of the Asserted Patents. Defendant STM knew or should have known that such encouragement would induce infringement. Such induced and/or contributory infringement has occurred at least since Defendant STM became aware of the Asserted Patents.

18. As a result, Defendant STM has been and still is infringing one or more of the claims of the Asserted Patents as defined by 35 U.S.C. § 271. MOSAID has suffered damage by reason of such infringement and will continue to suffer additional damage until this Court

enjoins the infringing conduct.

19. Defendant STM has continued its infringing activities after receiving notice of the Asserted Patents despite the objectively substantial and high likelihood that it is liable for infringement of valid patent rights, and, therefore, such infringement is willful, entitling MOSAID to the recovery of increased damages under 35 U.S.C. § 284.

20. Infringement of one or more of the Asserted Patents by Defendant STM renders this an "exceptional case" justifying an award of attorneys' fees and costs to MOSAID under 35 U.S.C. § 285.

21. MOSAID believes that Defendant STM will continue to infringe one or more of the Asserted Patents unless enjoined by this Court. Such infringing activity causes MOSAID irreparable harm and will continue to cause such harm without the issuance of an injunction.

## **COUNT ONE**

### **STM's Infringement of the '306 Patent**

22. MOSAID incorporates by reference each of the foregoing paragraphs of this Complaint as though fully set forth herein.

23. Defendant STM has been and is still directly infringing one or more of the claims of the '306 Patent. Defendant STM's infringing acts include, but are not limited to, making, using, offering to sell, selling, or importing devices within the scope of one or more of the claims of the '306 Patent, including but not limited to the SPC560 Family Microcontrollers, including at least SPC560B4x, SPC560B5x, SPC560C4x, SPC560C5x, SPC560S50x, SPC560S60x microcontrollers, and Cartesio STA 2065 series Infotainment Application Processors, including at least model 2065N, 2065A, and 2065P processors. Defendant STM has been and is still contributing to the infringement of and/or actively inducing third parties, such as end users, that

directly infringe one or more of the claims of the '306 Patent. Defendant STM's actions are in violation of one or more of the provisions of 35 U.S.C. § 271(a), (b), (c), (t), and (g).

## **COUNT TWO**

### **STM's Infringement of the '230 Patent**

24. MOSAID incorporates by reference each of the foregoing paragraphs of this Complaint as though fully set forth herein.

25. Defendant STM has been and is still directly infringing one or more of the claims of the '230 Patent. Defendant STM's infringing acts include, but are not limited to, making, using, offering to sell, selling, or importing devices within the scope of one or more of the claims of the '230 Patent, including but not limited to the SPEAr1340 HMI Embedded MPU, the SPEAr1310 (including the SPEAr1310-2) Dual-core Cortex A9 Embedded MPU, the Nomadik STn8810, STn8811 and STn8812 Application Processors, and the Cartesio STA2062, STA 2064 and STA 2065 series Infotainment Application Processors, including at least model STA2062A, STA 2064N, 2064A, 2065N, 2065A, and 2065P processors. Defendant STM has been and is still contributing to the infringement of and/or actively inducing third parties, such as end users, that directly infringe one or more of the claims of the '230 Patent. Defendant STM's actions are in violation of one or more of the provisions of 35 U.S.C. § 271(a), (b), (c), (t), and (g).

## **COUNT THREE**

### **STM's Infringement of the '505 Patent**

26. MOSAID incorporates by reference each of the foregoing paragraphs of this Complaint as though fully set forth herein.

27. Defendant STM has been and is still directly infringing one or more of the claims of the '505 Patent. Defendant STM's infringing acts include, but are not limited to, making,

using, offering to sell, selling, or importing devices within the scope of one or more of the claims of the '505 Patent, including but not limited to the SPEAr1340 HMI Embedded MPU, the SPEAr1310 (including the SPEAr1310-2) MPU, and the STR91xFA 16/32-bit Flash MCU Family, including at least models STR910FAM32, STR910FAW32, STR910FAZ32, STR912FAW32, STR911FAM42, STR911FAW42, STR912FAW42, STR912FAZ42, STR911FAM44 STR911FAW44, STR912FAW44, STR912FAZ44, STR911FAM46, STR911FAW46, STR912FAW46, STR912FAZ46, STR911FAM47, STR911FAW47, STR912FAW47 and STR912FAZ47. Defendant STM has been and is still contributing to the infringement of and/or actively inducing third parties, such as end users, that directly infringe one or more of the claims of the '505 Patent. Defendant STM's actions are in violation of one or more of the provisions of 35 U.S.C. § 271(a), (b), (c), (f), and (g).

#### **COUNT FOUR**

##### **STM's Infringement of the '036 Patent**

28. MOSAID incorporates by reference each of the foregoing paragraphs of this Complaint as though fully set forth herein.

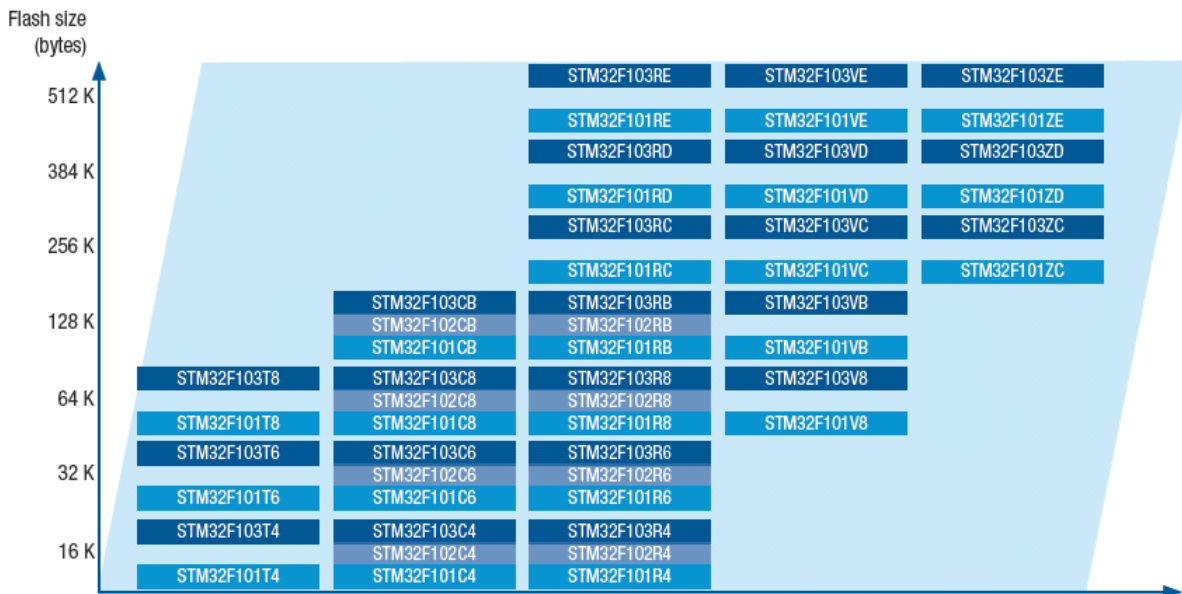
29. Defendant STM has been and is still directly infringing one or more of the claims of the '036 Patent. Defendant STM's infringing acts include, but are not limited to, making, using, offering to sell, selling, or importing devices within the scope of one or more of the claims of the '036 Patent, including but not limited to the STiH415 Advanced HD AVC processor with 3D graphics acceleration and ARM Cortex-A9 SMP CPU, the STiH416 Orly multi-core multimedia engine for advanced set-top boxes and servers, the FLI7680 Newman Ultra — Smart TV SoC worldwide H.264 decoder + Faroudja video/audio processing, the SPC560 Family Microcontrollers, including at least SPC560B4x, SPC560B5x, SPC560C4x, SPC560C5x,



SPC560S50x, SPC560S60x, SPC560P50L3, SPC560P50L5, SPC560P44L3 and SPC560P44L5 microcontrollers, the SPEAr1310 (including the SPEAr1310-2) MPU, the SPEAr1340 HMI Embedded MPU, and the STM32F10x 32-bit Flash Microcontrollers, including the following models:

### STM32F10x portfolio

60 fully compatible devices



. Defendant STM has been and is still contributing to the infringement of and/or actively inducing third parties, such as end users, that directly infringe one or more of the claims of the '036 Patent. Defendant STM's actions are in violation of one or more of the provisions of 35 U.S.C. § 271(a), (b), (c), (t), and (g).

## COUNT FIVE

### STM's Infringement of the '193 Patent

30. MOSAID incorporates by reference each of the foregoing paragraphs of this Complaint as though fully set forth herein.

31. Defendant STM has been and is still directly infringing one or more of the claims of the '193 Patent. Defendant STM's infringing acts include, but are not limited to, making,

using, offering to sell, selling, or importing devices within the scope of one or more of the claims of the '193 Patent, including but not limited to the Cartesio STA 2064 and STA 2065 series Infotainment Application Processors, including at least model STA 2064N, 2064A, 2065N, 2065A, and 2065P processors, the ST140 DSP Core and the GreenSIDE chip incorporating dual ST140 DSP Cores. Defendant STM has been and is still contributing to the infringement of and/or actively inducing third parties, such as end users, that directly infringe one or more of the claims of the '193 Patent. Defendant STM's actions are in violation of one or more of the provisions of 35 U.S.C. § 271(a), (b), (c), (t), and (g).

## **COUNT SIX**

### **STM's Infringement of the '725 Patent**

32. MOSAID incorporates by reference each of the foregoing paragraphs of this Complaint as though fully set forth herein.

33. Defendant STM has been and is still directly infringing one or more of the claims of the '725 Patent. Defendant STM's infringing acts include, but are not limited to, making, using, offering to sell, selling, or importing devices within the scope of one or more of the claims of the '725 Patent, including but not limited to the FLI7680 Newman Ultra — Smart TV SoC worldwide H.264 decoder + Faroudja video/audio processing, the Nomadik STn8810 and STn8811 Application Processors, the SPEAr1310 (including model SPEAr1310-2) MPU, the SPEAr1340 MPU, the STiH415 Advanced HD AVC processor with 3D graphics acceleration and ARM Cortex-A9 SMP CPU and the STiH416 Orly multi-core multimedia engine for advanced set-top boxes and servers. Defendant STM has been and is still contributing to the infringement of and/or actively inducing third parties, such as end users, that directly infringe one or more of the claims of the '725 Patent. Defendant STM's actions are in violation of one or

more of the provisions of 35 U.S.C. § 271(a), (b), (c), (t), and (g).

## **COUNT SEVEN**

### **STM's Infringement of the '240 Patent**

34. MOSAID incorporates by reference each of the foregoing paragraphs of this Complaint as though fully set forth herein.

35. Defendant STM has been and is still directly infringing one or more of the claims of the '240 Patent. Defendant STM's infringing acts include, but are not limited to, making, using, offering to sell, selling, or importing devices within the scope of one or more of the claims of the '240 Patent, including but not limited to the Cartesio STA 2064 and STA 2065 series Infotainment Application Processors, including at least model STA 2064N, 2064A, 2065N, 2065A, and 2065P processors. Defendant STM has been and is still contributing to the infringement of and/or actively inducing third parties, such as end users, that directly infringe one or more of the claims of the '811 Patent. Defendant STM's actions are in violation of one or more of the provisions of 35 U.S.C. § 271(a), (b), (c), (t), and (g).

## **COUNT EIGHT**

### **STM's Infringement of the '712 Patent**

36. MOSAID incorporates by reference each of the foregoing paragraphs of this Complaint as though fully set forth herein.

37. Defendant STM has been and is still directly infringing one or more of the claims of the '712 Patent. Defendant STM's infringing acts include, but are not limited to, making, using, offering to sell, selling, or importing devices within the scope of one or more of the claims of the '240 Patent, including but not limited to the ST100 DSP Core Family, including the ST140 DSP Core and the GreenSIDE chip incorporating dual ST140 DSP Cores. Defendant

STM has been and is still contributing to the infringement of and/or actively inducing third parties, such as end users, that directly infringe one or more of the claims of the '712 Patent. Defendant STM's actions are in violation of one or more of the provisions of 35 U.S.C. § 271(a), (b), (c), (t), and (g).

PRAYER FOR RELIEF

WHEREFORE, MOSAID prays for entry of judgment and an order that:

- (1) Defendant STM has infringed one or more of the claims of the Asserted Patents, either literally and/or under the doctrine of equivalents;
- (2) Defendant STM account for and pay to MOSAID all damages, assessment of interest, and costs of MOSAID caused by Defendant's patent infringement;
- (3) MOSAID be granted permanent injunctive relief pursuant to 35 U.S.C. § 283 enjoining Defendant STM, its officers, agents, servants, employees, affiliates and those persons in active concert of participation with STM from further acts of patent infringement of the Asserted Patents;
- (4) In the event the Court determines that it will not enter injunctive relief, Defendant STM continues to pay royalties to MOSAID for its infringement of the Asserted Patents on a going-forward basis;
- (5) Defendant STM account for and pay for increased damages for willful infringement under 35 U.S.C. § 284;
- (6) Costs and attorney's fees be awarded to MOSAID, as this is an exceptional case under 35 U.S.C. § 285; and
- (7) MOSAID be granted such further and additional relief as the Court may deem just

and proper under the circumstances.

DEMAND FOR JURY TRIAL

MOSAID demands trial by jury on all claims and issues so triable.

November 5, 2012

Respectfully submitted,

/s/ S. Calvin Capshaw

S. Calvin Capshaw

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